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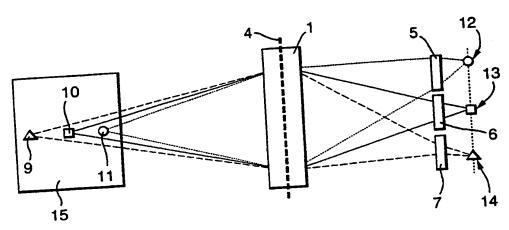
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(54) Title: THREE DIMENSIONAL IMAGING SYSTEM



(57) Abstract: A three dimensional imaging system is described which uses a diffraction grating (4) to divide a wavefront and ancillary optical modules (5, 6, 7) in each diffraction order to modify the imaging characteristics in each order. Object planes (9, 10, 11) located at different distances from the diffraction grating are imaged simultaneously and spatially separated (12, 13, 14) on a single image plane and correction for different levels of spherical aberration associated with different object planes is achieved.